



STATE OF CONNECTICUT

DEPARTMENT OF ENVIRONMENTAL PROTECTION



RECOMMENDED FINAL DETERMINATION

TO: Amey Marrella, Commissioner
DEP, 79 Elm Street, Hartford, CT

FROM: Betsey Wingfield, Bureau Chief
DEP, Bureau of Water Protection and Land Reuse, 79 Elm Street, Hartford, CT

SUBJECT: Final Determination - Recommendation to renew the General Permit for Nitrogen Discharges

On January 2, 2002, pursuant to Public Act 01-180, the Department of Environmental Protection (DEP) issued the General Permit for Nitrogen Discharges for the period effective January 2, 2002 through December 31, 2006. The general permit authorized the discharge of nitrogen from seventy-nine Publicly Owned Treatment Works (POTWs) and established annual limits for each POTW for each year and final permit limits to be achieved in the year 2014. These limits are based on the total maximum daily load (TMDL) of nitrogen from Connecticut and New York that will attain dissolved oxygen standards in Long Island Sound.

On September 23, 2005 the Nitrogen Credit Advisory Board proposed modification and early reissuance of the general permit. The general permit renewal included technical revisions such as changing References to Public Act 01-180 to Sections 22a-521 through 527 of the General Statutes; the effective date of the permit was modified to the period commencing on January 1, 2006 and ending December 31, 2010; and permit limits for 2006 were revised and included new limits for the years 2007 through 2010.

The attached general permit renewal covers the five year period from January 2011 through December 2015. Annual discharge limits for total nitrogen have been incorporated for the period 2011 through 2015 according to the methodology used to derive limits in the existing permit aimed at attainment of the 2014 TMDL. These facilities, in aggregate, must reduce the annual loading of total nitrogen to Long Island Sound by approximately 64% from the original baseline established in the TMDL in order to achieve the final 2014 wasteload allocation.

The draft general permit renewal and public notice were sent to the applicants for review and comment and the public notice was published in all major State newspapers including the *Norwich Bulletin*, the *Hartford Courant* and the *Connecticut State Post*. In the newspaper notices, interested parties were advised of the availability of the draft general permit renewal posted on the DEP website or by paper copy from DEP upon request. In addition, the notice was sent by certified mail to Chief Elected Officials of the 79 municipalities covered by the general permit. To ensure that Superintendents, Public Works Directors and Chairs of Water Pollution Control Authorities were aware of the notice, they were advised by regular mail and/or electronic mail. An informational meeting was also scheduled at the DEP on July 15, 2010. In accordance

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with state regulations, 30 days were provided for public comment.

Two municipalities and one environmental organization commented. The following is offered in response to comments raised during the Public Notice period.

Comments from the City of Norwalk:

1. The public notice was not very clearly advertised.

As noted above, the Notice was published in major newspapers, was sent by certified mail to Chief Elected Officials of the 79 municipalities covered by the General Permit and sent directly to Superintendents, Public Work Directors and Chairs of Water Pollution Control Authorities. Sufficient advertisement and notice were provided in accordance with state law.

2. The proposed limits for Newtown and Waterbury appear to be incorrect.

The permit limit for Newtown WPCF is correct and is reflective of the original wasteload allocation in the TMDL, which allowed for an anticipated increase in discharge of the new facility as the planned service area was hooked up. No modification to the general permit is necessary to address this comment.

The permit limit for Waterbury was in error in 2013 and has been corrected to be consistent with the final wasteload allocation specified in the TMDL. This change will be included in the final version of the General Permit.

3. Keep the 2010 limit flat until year 2014 as the DEP has not provided any outreach to communities to let them know that additional changes were going to be made to the permit limits prior to 2014.

The Department has a long history of communicating our management efforts aimed at Long Island Sound nitrogen control, in partnership with the EPA, dating back more than 20 years. Relevant to the General Permit, DEP conducted extensive public awareness campaigns on the water quality problems in Long Island Sound, all proposed management actions, the TMDL, the Wasteload Allocation (WLA), and the trading program both through the legislative process that enabled the Nitrogen Credit Exchange and in the public workshops offered to municipalities before the program started in 2002. The development of the trading program has its roots in a Water Environment Federation grant to the City of Norwalk that provided invaluable insight into how a trading program would work and formulated its original structure.

The 79 facilities regulated by the permit have been consistently informed that they must reduce the annual loading of total nitrogen to Long Island Sound by about 64% from the original baseline by 2014 in order to achieve the final WLA in the TMDL. The 2014 permit limit for each facility has been in each permit renewal so each facility would be aware of its final limit. In addition, the annual limits in the general permit have consistently decreased towards that final limit since issuance of the first general permit issued in 2002. No change is recommended.

4. Request that the DEP hold the existing 2010 nitrogen permit limit for the City of Norwalk through 2014 so that it may continue to have sufficient funds available to plan, design and construct its facility.

The individual final limits for 2014 were incorporated in prior permits and the current permit so each municipality would be aware of the final target for its facility, and could make decisions on

when they might want to upgrade based on economic and logistical considerations relevant to their facility. Part of that planning process, of necessity, would include periods of construction and/or variations in the expenditures for credits that could increase prior to a facility's locally scheduled upgrade. Some municipalities did have to incur substantial costs for purchase of credits, sometimes in excess of \$1 million per year, but it was an integral part of the planning process of individual municipalities that they could control. The construct of the statute, the trading program and the general permit do not allow for deviations in anticipation of future outcomes, and it would be unfair to alter the rules at this time since many have already been in Norwalk's current position and have borne their share of the incumbent costs. No change is recommended.

Letter from the Town of Greenwich:

1. The comments from the Town of Greenwich asked that DEP hold existing 2010 nitrogen permit limits for at least 1 year for those municipalities that are under construction between 2011 and 2014.

This issue was also raised by the City of Norwalk and has been addressed in the Department's responses for comments number 3 and 4 above.

2. Determination as to where the Nitrogen Trading program is going beyond 2014.

DEP agrees that the municipalities should be informed of the future of the program beyond 2014. There is no expectation at this time that the final wasteload allocation will change as it is consistent with the current TMDL for nitrogen, adopted in 2001.

Commissioners from the five states that are in the Long Island Sound watershed recently agreed to collaborate on a five-state TMDL. This decision was made to provide all states (Connecticut, New York, Massachusetts, New Hampshire and Vermont) with a better opportunity to contribute to the revision of the TMDL, and a legal commitment to implementing the TMDL. The process for adopting a revised TMDL will include a public process at such time. No modification to the general permit is necessary to address this comment.

Letter from Connecticut Fund for the Environment / Save the Sound :

1. Request that DEP not only make it clear that unlimited credits will not be available for purchase under the TMDL but also set forth a clear system to determine how credits will be allocated if credit demand exceeds the supply available under the 2009 TMDL WLA.

The Department remains highly confident that the incentives provided by the credit exchange program along with favorable Clean Water Fund grant/loan monies to benefit nitrogen projects has been and will be sufficient to comply with the aggregate TMDL WLA for 2009. In 2009 the equalized average was 11,674 eq. lbs nitrogen per day, which is below the 2009 WLA target specified in the TMDL of 13,149 eq. lbs nitrogen per day.

The intention of DEP has been to aggressively manage planning, funding and construction of new nitrogen treatment facilities in a way that that will ensure enough credits are available for sale to all POTWs by 2014. The Department projects that a sufficient number of nitrogen removal projects are currently underway to meet the 2014 nitrogen allocation. Thirteen additional facilities are to be upgraded by 2013 and, based on the plants that will come on line in 2010 and a linear extrapolation, it is predicted that in 2013 the 63.5% reduction required by the

TMDL WLA for 2014 will be met.

In the event that insufficient credits are available in spite of these efforts, DEP will consult with the Nitrogen Credit Advisory Board (NCAB) and determine the best option to pursue. The DEP agrees that a letter should be sent to all the municipalities participating in the program informing them of the status and direction of the general permit with respect to meeting TMDL requirements, and the steps that DEP will take in the event the collective WLA is exceeded. In 2011, DEP will work with the NCAB to agree upon alternatives that DEP will take in case the collective WLA is exceeded.

If there are not enough credits to sell to all the POTWs and stay in compliance with the TMDL, the credits could be proportionally distributed amongst those facilities that are in compliance with no need to take action against that subset.

For those facilities that might be out of compliance with the TMDL limits, the DEP has the authority to take enforcement action as stipulated under Section 4(b)(2) of the general permit, and of chapter 446K of the Connecticut General Statutes. Also, enforcement actions will be taken if the permittee fails to secure sufficient state-owned equivalent nitrogen credits in a timely manner in accordance with the Nitrogen Credit Exchange Program and Section 22a-521 through 527 of the Connecticut General Statutes. No change to the permit is necessary or recommended in response to this comment.

2. To meet the 2014 final TMDL WLA, the NCAB will have to continue to increase the price of credits and DEP will have to decrease the quantity of credits sold on an annual basis.


As mentioned previously the Department's current projections indicate that a sufficient number of nitrogen removal projects are underway to meet the TMDL WLA 2014 limit. There is no present indication that price manipulation is necessary to force further action. Nevertheless, the price of the credit will increase because thirteen additional facilities will be on line with nitrogen removal upgrades by 2013, which increases overall credit cost as the capital and operation and maintenance costs for those upgrades are added to the price calculation. This will incentivize additional action on the part of the facilities covered under the permit.

The NCAB and the DEP do not have the authority to adjust the price of the credit except as stated under the General Statutes of Connecticut in Section 22a-527(b), i.e., by dividing the total annual project cost by the reduction of equivalent pounds of nitrogen. No change to the permit is necessary or recommended in response to this comment.

I recommend that you adopt the Tentative Determination and issue the referenced permit.

Dated:

12/23/10


Betsey Wingfield
Bureau Chief